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# THE SHELL OF CATESBY'S HERMIT-CRAB

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## ABSTRACT

When the English naturalist Mark Catesby illustrated "*The Hermit-Crab*" in 1734, he pictured it inside the shell of the West Indian topsnail, *Cittarium pica* (Linnaeus, 1758). This creature was not accounted for in a 2012 review of the plant and animals illustrated by Catesby.

In an earlier volume of Phytoneuron (Reveal 2012), a nomenclatural summary of the plants and animals illustrated by the English naturalist and artist Mark Catesby (1683–1749) was presented. It did not occur to me in treating the creatures on t. 33 of the second volume published in 1834 that the shell in which Catesby positioned the land hermit crab, *Ceonobita clypeatus* (Fabricius, 1787), was identifiable. Dr. Robert Robertson, the emeritus curator of the Department of Malacology at the Academy of Natural Sciences in Philadelphia, soon sent me his paper (Robertson 2003) on the edible West Indian "whelk" in which he discusses the natural history of *Cittarium pica* (Linnaeus 1758) and even reproduced the Catesby image (his fig. 5, p. 34). The reason I failed to identify the shell was that Catesby himself did not propose a name. Yet, Catesby had a discussion and mentioned a generic name:

> The shells they [the hermit crab] mostly make use of are of the *Buccinum* kind, whose spiral form is most fit to hold them fast, and secure them in the shell, in which they can fix themselves to fast, by means of short claws at their tails, that in pulling them out of it, the tender part separates from the crustaceous, and remain in the spiral part of the shell.

Catesby's use of the expression "of the *Buccinum* kind" is understandable as the common whelk, *Buccinum undatum* Linnaeus (Syst. Nat., ed. 10, 1: 740. 1758), is a large snail common to many an English garden and is frequently encountered in coastal marine waters where, not surprisingly, they are the home of large hermit crabs. Linnaeus recognized that the Old World snail differed from the one in the New World and named the West Indian topsnail *Turbo pica* (Linnaeus, Syst. Nat., ed. 10, 1: 763. 1758) making, like me, no reference to the Catesby illustration.

Recognition of Catesby's shell was not new with Dr. Robertson's paper. Broderip (1828) identified the shell stating (p. 206) that "Catesby gives a figure of Pagurus Diogenes in the shell of Turbo Pica." Nonetheless, failure to note this lies with me.

Two other oversights in my 2012 paper require comment. Thanks to the editor's mother-in-law, Carol Wells of Natchitoches, Louisiana, I can only repeat her comment that likely Catesby's father did not survive him as I implied, nor did Catesby go to the Bermuda Islands as a ghost. Thus, Catesby's father passed in 1705 (not 1805, p. 1), and his visit to the Islands was in 1725 (not 1825, p. 2). Neither the editor nor I have any excuses except to note that many others read an early version of this manuscript and also failed to spot the obvious!

## LITERATURE CITED

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